

REMARKS

Claims 1-18, 20-24, 26-34, 52-59 and 65-71 are pending in the present application.
Claims 19, 25, 42, and 60-64 are cancelled. Reconsideration is respectfully requested.

1. Claim Rejections Under 35 USC § 112

Claims 26-34 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 26 is hereby amended and the § 112 rejection is now moot for claim 26 and for claims 27-34 which depend from claim 26.

2. Rejection of Claim 52 Under 35 USC § 102(b)

Claim 52 is rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Shinbara (US 4,788,994). Applicants traverse this rejection.

Claim 52 recites, in part, supplying a first fluid to the chamber to expose the first side and the peripheral edge to the first fluid *while excluding at least a major portion of the second side from exposure to the first fluid, wherein the at least a major portion of the second side excludes an outer margin of the second side.*

The '994 patent discloses a wafer holding system designed such that low corrosion resistant parts of the device are disposed outside the treatment chamber. (Col. 1, ll. 48-55; Col. 4, ll. 23-28). The disclosed '994 patent system includes three or four chuck pieces (e.g., 1 and 1(a), Figs. 1-2) that hold the outer edge of the wafer at three or four points on the edge of the wafer so that both sides of a wafer may be treated simultaneously. As the wafer W rotates, fluid is jetted onto the upper and lower surfaces of the wafer. (Col. 1, ll. 18-27; Col. 7, ll. 54-63). The entire first and second surfaces of the wafer W are exposed to the fluids. Nothing in the '994 patent teaches or suggests exposing the first side and second side of a wafer *while excluding at least a major portion of the second side from exposure to the first fluid, wherein the at least a major portion of the second side excludes an outer margin of the second side.* The '994 patent figures (1 and 2) and the specification section (Col. 6, ll. 60-65) cited by the Examiner teach exposing the entire first and second. The '994 patent does not teach or suggest exposing one portion of a

surface of the wafer to a fluid while excluding exposure of another portion of that same surface from the fluid and thus does not anticipate Applicants' process recited in claim 52.

3. Rejection of Claims 53-55 Under 35 USC § 102(b)

Claims 53-55 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Shinbara (US 4,788,994). Applicants traverse this rejection.

Claim 53 recites, in part, supplying a first fluid to the first chamber portion to expose the first side to the first fluid *while excluding any portion of the second side that is not an outer margin of the second side from exposure to the first fluid.*

As discussed above in relation to claim 52 (Ref. 2 above), the '994 patent does not teach or suggest exposing one portion of a surface of a workpiece to a fluid while excluding exposure of another portion of that same surface from the fluid. Thus, the '994 patent does not anticipate Applicants' processes recited in claims 53-55.

Claims 53 - 55 are also allowable for the unique and non-obvious combination of features each recites - these further patentable features are not discussed specifically herein since there has already been at least one reason for allowance set forth.

4. Rejection of Claims 56-59 Under 35 USC § 102(b)

Claims 56-59 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Shinbara (US 4,788,994). Applicants traverse this rejection.

Claims 56-59 are not anticipated by the '994 patent for the same reasons discussed above in relation to claims 52-55.

Claims 57 - 59 are also allowable for the unique and non-obvious combination of features each recites - these further patentable features are not discussed specifically herein since there has already been at least one reason for allowance set forth.

5. Rejection of Claims 56-59 Under 35 USC § 103(a)

Claims 1-2, 4-9, 11, 16, 24, 65-66 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shinbara (US 4,788,994) in view of Ohmi et al. (US 5,487,398). Applicants traverse this rejection.

Claims 1-2, 4-9, 11, 16, and 24: Claim 19 was indicated by the Examiner as being allowable if rewritten in independent form. Claim 19 depended from claim 1. Claim 1 has been amended to include the limitation of claim 19 (claim 19 has been cancelled herein). Claims 2, 4-9, 11, 16, and 24 depend from claim 1. Thus, claims 1-2, 4-9, 11, 16, and 24 are allowable over the art of record. Claims 2, 4-9, 11, 16, and 24 are also allowable for the unique and non-obvious combination of features each recites - these further patentable features are not discussed specifically herein since there has already been at least one reason for allowance set forth.

Claims 65-66: Claim 65 has been amended to recite, in part, supplying a first fluid to the chamber to expose the first side and the outer margin of the second side of the workpiece to the first fluid while excluding a major portion of the second side of the workpiece from exposure to the first fluid. As discussed above in relation to claim 52 (Ref. 2 above), the '994 patent does not teach or suggest exposing one portion of a surface of a workpiece to a fluid while excluding exposure of another portion of that same surface from the fluid. The '398 patent does not make up for this deficiency of the '994 patent, nor does the Examiner assert that the '398 patent teaches or suggests such. Because the art of record does not teach or suggest a process as recited in claims 65-66 wherein a first fluid is supplied to the chamber to expose the first side and the outer margin of the second side of the workpiece to the first fluid while excluding a major portion of the second side of the workpiece from exposure to the first fluid, claims 65-66 are allowable over the art of record.

Claim 66 is also allowable for the unique and non-obvious combination of features it recites - these further patentable features are not discussed specifically herein since there has already been at least one reason for allowance set forth.

6. Rejection of Claims 3, 10, and 12-15 Under 35 USC § 103(a)

Claim 3 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shinbara (US 4,788,994) in view of Ohmi et al. (US 5,487,398) and further in view of Yamamura (US 5,893,004). Claims 10, 12 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Shinbara (U.S. 4,788,994) in view of Ohmi et al. (US 5,487,398) and further in view of Tsuji (US 5,454,901). Claims 13-15 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Shinbara (US 4,788,994) in view of Ohmi et al. (US

5,487,398) and further in view of Lawrence (US 3,923,567). Applicants traverse these rejections.

As discussed in relation to claim 1 (Ref. 5 above), claim 1 has been amended to include the limitation of claim 19 and claim 19 was indicated by the Examiner as allowable if rewritten in independent form. Claims 3, 10, and 12 -15 depend from claim 1 and are accordingly allowable over the art of record.

Claims 3, 10, and 12 -15 are also allowable for the unique and non-obvious combination of features each recites - these further patentable features are not discussed specifically herein since there has already been at least one reason for allowance set forth.

7. Rejection of Claims 26-27, and 34 Under 35 USC § 103(a)

Claims 26-27, 34 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shinbara (US 4,788,994) in view of Tsuji (US 5,454,901). Applicants traverse this rejection.

Claim 26 recites, in part, supplying a first fluid to the first chamber portion to expose the first side and the peripheral edge to the first fluid while contacting no more than an outer margin of the second side with the first fluid. As discussed above in relation to claim 52 (Ref. 2 above), the '994 patent does not teach or suggest exposing one portion of a surface of a workpiece to a fluid while excluding exposure of another portion of that same surface from the fluid. The '901 patent does not make up for this deficiency of the '994 patent, nor does the Examiner assert that the '901 patent teaches or suggests such. Because the art of record does not teach or suggest a process as recited in claims 26-27 or 34, these claims are allowable over the art of record.

Claims 26-27 or 34 are also allowable for the unique and non-obvious combination of features each recites - these further patentable features are not discussed specifically herein since there has already been at least one reason for allowance set forth.

8. Claims 19, 20, 23, 67-71 Indicated Allowable if Re-written in Independent Form

Claims 19, 20, 23, 67-71 were objected to as being dependent upon a rejected base claim, but were considered by the Examiner to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 19, 20, and 68-71: Claim 1 has been amended to include the limitation of claim 19. Claim 19 has been cancelled and claims 20 and 68-71 depend from claim 1. Accordingly, claim 1 and the claims depending therefrom are allowable over the art of record.

Claims 23 and 67: Claims 23 and 67 have been rewritten in independent form including all of the limitations of claim 1 and any intervening claims. Thus, claims 23 and 67 are allowable.

The Examiner indicated that claims 28-33 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in the Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 28-33: Claim 26 is allowable for the reasons discussed above (Refs. 1 and 7). Claims 28-33 depend from claim 26 and are allowable for the same reasons. Claims 28-33 are also allowable for the unique and non-obvious combination of features each recites - these features are not discussed individually herein since there has already been at least one reason for allowance set forth.

Based on the foregoing, Applicants respectfully request that a Notice of Allowance be issued for the claims pending in the present application. If the Examiner has any questions or concerns or is in need of further information, the Examiner is requested to please contact the undersigned via telephone so that the matter may be resolved as quickly as possible.

Respectfully submitted,

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